

We Claim:

1. An arrangement for web services management or integration, comprising:
  - a transaction adapter module for receiving client requests in a client-specific protocol and having one or more transaction adapters, each of said transaction adapters for translating at least a portion of said client request to a predetermined protocol; and
  - a query adapter module for communication with a set of query services and having one or more query adapters, each of said query adapters for translating at least a portion of said client request from said predetermined protocol to a service-specific protocol;
  - wherein said transaction adapter module and said query adapter module are modularly interfaceable with a service broker adapted to direct queries to said query services, and
  - wherein said predetermined protocol allows said transaction adapter module, said query adapter module and said service broker to be decoupled, thereby allowing dynamic loading of adapters to at least one of said transaction adapter module and said query adapter module.
2. The arrangement according to claim 1, wherein said transaction adapter module is adapted to isolate a query within said client request.
3. The arrangement according to claim 2, wherein a WSDL definition is used to present said isolated query to said service broker.
4. The arrangement according to claim 1, wherein said predetermined protocol is XML-based.
5. The arrangement according to claim 4, wherein said predetermined protocol is SOAP.
6. The arrangement according to claim 1, wherein said transaction adapter module is adapted to apply a set of policies to said client requests.

7. The arrangement according to claim 6, wherein said set of policies is predetermined.
8. The arrangement according to claim 6, wherein said set of policies is dynamically configurable.
9. The arrangement according to claim 6, wherein said set of policies includes client authentication.
10. The arrangement according to claim 6, wherein said set of policies includes security management.
11. The arrangement according to claim 6, wherein said set of policies includes performance management.
12. The arrangement according to claim 6, wherein said set of policies includes fault management.
13. The arrangement according to claim 6, wherein said set of policies includes resource management.
14. The arrangement according to claim 6, wherein said set of policies includes customer management.
15. The arrangement according to claim 1, wherein said query adapter module is adapted to apply a set of policies to said client requests.
16. The arrangement according to claim 15, wherein said set of policies is predetermined.

17. The arrangement according to claim 15, wherein said set of policies is dynamically configurable.
18. The arrangement according to claim 1, wherein said service broker is adapted to apply a set of policies to said client requests.
19. The arrangement according to claim 18, wherein said set of policies is predetermined.
20. The arrangement according to claim 18, wherein said set of policies is dynamically configurable.
21. The arrangement according to claim 1, wherein said transaction adapter module and said query adapter module are further modularly interfaceable with other adapter modules.
22. The arrangement according to claim 1, wherein said transaction adapter module comprises:
  - a director module for determining the client-specific protocol and directing the message to a corresponding adapter.
23. The arrangement according to claim 22, wherein said transaction adapter module further comprises:
  - a policy module for determining and applying policies corresponding to at least one of a client, a transaction and a service.
24. The arrangement according to claim 1, further comprising:
  - a graphical user interface for allowing a user to reconfigure at least one of said transaction adapter module and said query adapter module.

25. A web services arrangement, comprising:

a transaction adapter module for receiving client requests and having one or more transaction adapters; and

a query adapter module for communication with a set of query services and having one or more query adapters; and

a service broker adapted to receive queries from said transaction adapter module and to access service resources at least partly through said query adapter module,

wherein said service broker includes a mapping of each service to one or more operational nodes corresponding to one or more operations required to perform said service.

26. The arrangement according to claim 25, wherein at least one node corresponds to another service.

27. The arrangement according to claim 25, further comprising:

a graphical user interface adapted to allow a user to reconfigure said mapping.

28. The arrangement according to claim 27, wherein said graphical user interface is further adapted to allow a user to reconfigure policies.

29. The arrangement according to claim 28, wherein said policies includes client authentication.

30. The arrangement according to claim 28, wherein said policies includes security management.

31. The arrangement according to claim 28, wherein said policies includes performance management.

32. The arrangement according to claim 28, wherein said policies includes fault management.

- 33. The arrangement according to claim 28, wherein said policies includes resource management.
- 34. The arrangement according to claim 28, wherein said policies includes customer management.
- 35. The arrangement according to claim 25, wherein said mapping is optimized for minimum cost.
- 36. The arrangement according to claim 35, wherein said mapping is optimized using embedded logic.
- 37. The arrangement according to claim 35, wherein said mapping is optimized using artificial intelligence.
- 38. The arrangement according to claim 35, wherein said mapping is optimized using a rules-based engine.
- 39. The arrangement according to claim 25, further comprising:
  - a graphical user interface adapted to allow a user to reconfigure business process flow management.